46 BC

Caesar asked the astronomer
SOSIGENES to review the Cal and suggest
ways of improving it. Caesar ordered
the Romans to disregard the moon
in calculating their calendars.
He divided the year into 12 mos
of 31 and 30 days, except Feb. which
had only 29 days. Every 4th year
it would have 30 days. HE MOVED
THE BEGINNING OF THE YR from

MAR 1 to JAN 1.

To realign the Cal with the seasons he ruled that the year we call 46 B.C. have 445 days. The Romans called this the year of Confusion.

The Romans renamed QUINTILIS to honor Julius Caesar, giving us July.

475BC - 46BC.

Julius Caesar's Julian Calendar
introduced (708 A.U.C.)

46BC was 445 day long.

46 BC.

The priests forgot or purposely neglected to insert the intercalary month. (MERCEDONUS) and in 46 BC the difference between the solar and lunar years amounted to 90 days (67 and a Mercedonius of 23 days.).

Julius Caesar inserted 67 days between Nov. and Dec. so that the number of days in 46BC was 445 (355 + 23 + 67). Then

with the mathematician Sosigenes Caesar started the Julian Cal. Jan 1. 45 BC. The new year was deemed to be on Jan 1., the day in which the Consuls assumed office. To bring the 355-day yr into line with the Solar year Caesar added 2 days to Jan., Aug. and Dec. and 1 day to each of April June, Sept and Nov. Feb normally having 28. Three ordinary yrs would be followed by an leap year (366 days) in which Feb 24 was counted twice

46 B.C

To correct error of Spring
equinox in June, Caesar
made 46 B C 445 days long
(The year of Confusion)

46 B.C.

The Julian Cal. was introduced into Rome in 46BC. It was the most readily used one in the Western World until the Gregorian Cal. replaced it.

46 BC

JULIAN CAL.

The republican Cal. became hopelessly confused by the end of the republic both because of failures on the part of the priests and because of political maneuvers. The Cal. was interfered with so as, for ex. to reduce or extend the term of office of a particular magistrate. Julius Caesar undertook this reform. By 46 BC the Cal had become so seriously out of step with the seasons that the Calendar equinox had become separated from the astronomical equinox by 3 months. Winter was carried

back into the autumn months and autumn into summer. Caesar as pontifex maximus and dictator and advised by the Alexandrian astronomer SOSIGENES, began his reformation in 46 BC by intercalating 67 days between the months of Nov. and Dec, thus making that year 445 days in length. By this action the civil and astronomical years were brought into line. The lunar Cal. was abolished and it was decreed that regulation should be on the basis of a solar Cal. Sosigenes also suggested that the length of the year should be 365 1/4 days. It was decided that in a 4 year Ⓐ

cycle the 1st three yrs should have 365 and the 4th have 366 days. This new Cal. was adopted in 45 BC. Caesar also decreed that the year should begin on Jan. 1.

There has been a ~~deadline~~ that he ordered odd numbered months i.e. Jan, MAR, MAY, JULY, SEP AND NOV to have 31 days; APR, JUN, AUG, Oct, Dec 30 days; and Feb extra 29 w 30 (with 4th yr). The grammarian Ambrosius Theodosius MACROBIUS (4th-5th cen A.D) in his "SATURNALIA" flatly contradicts it. (Evidence has not been found)

Caesar decreed the changes to the Calendar.

The old lunar Calendar was running several months fast as against the solar year.

The College of priests sometimes increased the length of the year to keep Consuls and senators they served in office longer, or decreased the year

to shorten rivals' terms

46BC

from *Lives of the Caesars* by SUETONIUS

then (46BC) turning his attention to
the reorganization of the state, he reformed
the calendar, which the pontiffs had long
since so disordered, by neglecting
to order the necessary intercalations,
that the harvest festivals did not come
in summer nor those of the vintage
in the autumn. He adjusted the

DOMINICAL LETTER
EASTER
EPACT
ERA
GOLDEN NUMBER
LUNAR CYCLE
METONIC CYCLE
SOLAR CYCLE
TIME

To assist farmers, Caesar issued an almanac showing in which dates of his new Cal. various seasonal astronomical phenomena would occur

Had 2 intercalations

1st was customary intercalation
of the Roman Republican Cal. done
that year, the insertion of 23 DAYS
following Feb. 23.

2nd intercalation — Inserted 2
additional months between end
of Nov. and beginning of Dec.
This was an addition of 67 days

These caused the beginning of 45 BC the new yr. to begin Jan. 1 of the Julian Cal.

Sosigines also intercalated a day between 2/23 and 2/24 every 4th yr. This day was known as pars tum temprio

46BC — yr of confusion

Caesar added:

23 days of an intercalary month
after Februarius

Added month of 34 days
Added month of 33 days
   both between Nov. & Dec.

so the total was 445 days